

Claims:

1. A drop box for receiving mail pieces for collection and delivery by a postal service comprising:
 - an enclosure having a slot sized for receiving mail pieces;
 - a feeder positioned inside the drop box for engaging and conveying mail pieces
 - 5 inserted into the slot;
 - a detection device disposed for measuring a physical property of a mail piece engaged by the feeder, which property is associated with potential contamination of the mail piece; and
 - a control system operable to take an action when a potentially contaminated mail
 - 10 piece is detected by the detection device.
2. The drop box of claim 1 further comprising means for reversing the feeder when a potentially contaminated mail piece is detected.
3. The drop box of claim 1 further comprising means for sensing a mail piece inserted therein and activating the feeder when a mail piece is inserted into the slot.
4. The drop box of claim 3 further comprising means for reversing the feeder when a potentially contaminated mail piece is detected.
5. The drop box of claim 1 further comprising alarm means activated by the control system upon detection of a potentially contaminated mail piece.
6. The drop box of claim 1 wherein the detection device is a scanner forming an image of the mail piece and the control system includes a computer programmed with analysis logic to identify patterns associated with potentially contaminated mail pieces.

7. The drop box of claim 1 wherein the detection device measures a physical property of the mail piece and the control system includes pre-programmed logic to initiate an action when the measured physical property indicates a potentially contaminated mail piece.

8. The drop box of claim 7 further comprising a door for closing the slot and a lock for securing the door and means for activating the lock and wherein the initiated action is activation of the lock.

9. The drop box of claim 7 further comprising alarm means and wherein the initiated action is activating the alarm means.

10. The drop box of claim 1 further comprising means for capturing and recording an image of individuals depositing mail pieces in the drop box.

11. A drop box for receiving mail pieces for collection and delivery by a postal service comprising:
- an enclosure having a slot sized for receiving mail pieces;
 - a feeder positioned inside the drop box for engaging and conveying mail pieces
- 5 inserted into the slot;
- means for sterilizing mail pieces conveyed by the feeder.
12. The drop box of claim 11 further comprising sensor for activating the feeder when the sensor detects a mail piece inserted in the drop box.
13. The drop box of claim 11 wherein the means for sterilizing mail pieces comprises a source of electromagnetic radiation.
14. The drop box of claim 13 wherein the electromagnetic radiation is ebeam or X-ray frequency radiation.
15. The drop box of claim 13 wherein the electromagnetic radiation is laser, maser or UV frequency radiation.
16. The drop box of claim 11 further comprising means for detecting a potential contaminant inside the drop box.
17. The drop box of claim 16 further comprising a controller for initiating a preprogramed action when a potential contaminant is detected inside the drop box.

18. 11. A drop box for receiving mail pieces for collection and delivery by a postal service comprising:

an enclosure having a slot sized for receiving mail pieces;

5 a feeder positioned inside the drop box for engaging and conveying mail pieces inserted into the slot;

means for detecting a potential contaminant inside the drop box; and

a controller for initiating a preprogrammed action when a potential contaminant is detected inside the drop box.

19. The drop box of claim 18 further comprising an alarm and wherein the preprogrammed action is activating the alarm upon detection of a potential contaminant.

20. The drop box of claim 18 further comprising means for sterilizing the interior of the drop box and its contents and wherein the preprogrammed action is activating the sterilization means.